

AMENDMENTS TO THE CLAIMS

1. (Canceled)

2. (Currently amended) A The personal authentication apparatus for certifying that a user is the user, comprising: as claimed in claim 1, wherein said face picture of said particular person is a face picture of a suspected person;

a memory holding a face-picture of the user therein;

an image pickup unit taking a face-picture of said user;

a particular person comparing unit comparing said user's face-picture taken by said image pickup unit with a face-picture of a particular person, who is categorized as suspected, held therein in advance, outputting as comparison result a degree of similarity therebetween, and deciding whether said degree of similarity is higher than a predetermined value;

a personal picture acquiring unit for acquiring the face-picture of the user from said memory; and

an authentication unit, when said degree of similarity is higher than said predetermined value, deciding whether or not said user's face-picture is identical with the face-picture of the user by a method stricter than the method used therebefore.

~~said particular person comparing unit decides whether or not said user's face picture is similar to the face picture of said suspected person and outputs the decision result as said comparison result,~~

~~———when said particular person comparing unit decides that said user's face picture is similar to the face picture of said suspected person, said authentication unit decides whether or not said user's face picture is identical with the face picture of said person himself with more strict reference.~~

3. (Currently amended) The personal authentication apparatus as claimed in claim 2, wherein when said particular person comparing unit decides that said ~~user's face picture is similar~~ degree of similarity is higher than a predetermined value ~~to the face picture of said suspected person~~, said image pickup unit heightens resolution or gradation, and takes the user's face-picture again,

said authentication unit decides whether or not said user's face-picture having the enhanced resolution or gradation is identical with the face-picture of the user ~~said person himself~~ ~~in order to decide with more strict reference~~.

4. (Currently amended) The personal authentication apparatus as claimed in claim 2, wherein when said degree of similarity is higher than said predetermined value, said authentication unit increases the number of the features that are extracted from each of said user's face-picture and the face-picture of the user ~~said person himself~~ ~~in order to decide with more strict reference~~.

5. (Currently amended) The personal authentication apparatus as claimed in claim 2, wherein when said degree of similarity is higher than said predetermined value, said authentication unit further acquires new features of appearance of the user ~~said person himself~~ ~~to decide with more strict reference~~, and decides whether or not said user's face-picture is identical with the face-picture of the user ~~said person himself~~ using said newly acquired features.

6. (Currently amended) The personal authentication apparatus as claimed in claim 2, wherein said image pickup unit takes said user's face-pictures as an animated image,

said personal picture acquiring unit acquires the animated image of the face-pictures of the user ~~said person himself~~ from said memory,

when said degree of similarity is higher than said predetermined value, said authentication unit decides whether or not said user's face-picture is identical with the face-picture of the user ~~said person himself~~ by comparing a plurality of frames in the animated image of said user's face-pictures with ~~and~~ a plurality of frames in the animated image of the face-

pictures of ~~the user~~said person himself to decide with more strict referencee.

7. (Currently amended) The personal authentication apparatus as claimed in claim 21, wherein when said degree of similarity is higher than said predetermined value, said authentication unit changes the type of the features that are extracted from each of said user's face-picture and the face-picture of ~~the user~~said person himself based upon the comparison result by said particular person comparing unit.

8. (Currently amended) The personal authentication apparatus as claimed in claim 3, wherein when said degree of similarity is higher than said predetermined value, said particular person comparing unit decides that said user's face-picture is similar to the face-picture of said suspected person,said image pickup unit takes said user's face-picture by irradiating an invisible light to said user,

said authentication unit decides whether or not said user's face-picture is identical with the face-picture of the user ~~said person himself~~ using said user's face-picture taken by irradiation of the invisible light to decide with more strict referencee.

9. (Currently amended) The personal authentication apparatus as claimed in claim 21, wherein said personal authentication apparatus certifies that a plurality of users are ~~is the user~~ person himself respectively,

said particular person comparing unit compares said user's face-picture taken by said image pickup unit with said face-pictures of a plurality of said particular persons,

further comprising a log holding unit for holding information of when the certification for each of said users is performed and whether or not said degree of similarity is higher than a predetermined value, the information being associated with the user, authentication times of the plurality of said persons himself and the particular persons having a resemblance in response to the person himself,

said authentication unit decides what standard should be used for deciding a decision method of whether or not said users are ~~is the user~~ person himself using said information

~~another authentication history of said person himself held in said log holding unit.~~

10. (Currently amended) The personal authentication apparatus as claimed in claim 9, wherein each of said plurality of particular persons is the suspected person,

~~when said degree of similarity is higher than said predetermined value deciding that said face pictures of said plural other persons himself are similar to the face pictures of said plural suspected persons respectively at plural times within a predetermined time, said authentication unit decides whether or not said user's face-picture is identical with the face-picture of the user by a standard stricter than the standard used therebefore~~
said person himself with more strict reference.

11. (Currently amended) The personal authentication apparatus as claimed in claim ~~21~~, further comprising a person deciding apparatus installed in a place other than that of said personal authentication apparatus, deciding whether or not said user is the user, wherein when said degree of similarity is higher than said predetermined value, particular person comparing unit decides that said user's face picture is similar to the face picture of said suspected person, said authentication unit transmits said user's face-picture to said a person deciding apparatus installed in other places than that of said personal authentication apparatus for deciding whether or not said user is said person himself.

12. (Currently amended) The personal authentication apparatus as claimed in claim ~~21~~, wherein said image pickup unit includes a first image pickup unit and a second image pickup unit,

said particular person comparing unit compares said user's face-picture taken by said first image pickup unit with the face-picture of said particular person,

~~when said degree of similarity is not higher than said predetermined valuesaid particular person comparing unit decides that said user's face picture is not similar to the face picture of said suspected person, said authentication unit decides whether or not said user's face-picture taken by said first image pickup unit is identical with the face-picture of the usersaid person~~

himself,

when said degree of similarity is higher than said predetermined value~~said particular person comparing unit decides that said user's face picture is similar to the face picture of said suspected person~~, said authentication unit decides whether or not said user's face-picture taken by said second image pickup unit is identical with the face-picture of the user~~said person himself~~.

13. (Currently amended) The personal authentication apparatus as claimed in claim 12, wherein said second image pickup unit generates a the face-picture having more amount of information than that of the face-picture taken by said first image pickup unit.

14. (Currently amended) The personal authentication apparatus as claimed in claim ~~24~~, wherein said personal authentication apparatus is coupled to another personal authentication apparatus that is provided separately along the path through which said user passes, and wherein when said degree of similarity is decided higher than a predetermined value~~particular person comparing unit decides that said user's face picture is similar to the face picture of said suspected person~~, said authentication unit acquires said user's face-picture from said another other personal authentication apparatus ~~provided on a path through which said user passes~~, and decides whether or not said user's face-picture taken by said image pickup unit is identical with the face-picture of the user ~~said person himself~~ using said user's that face-picture acquired by said another personal authentication apparatus.

AMENDMENTS TO THE DRAWINGS

The attached sheet(s) of drawings includes changes to Figs. 2, 3, 4, 5, and 8. Elements 100 in Figs. 2 and 8, 120 in Fig. 3, and 140 in Fig. 4 are amended to elements 100, 120 and 140 with freestanding arrows. In addition, in Fig. 5, the question “USER IS SIMLAR TO WHICH DANGEROUS PERSON?” in S60 is amended to “USER IS SIMILAR TO ANY DANGEROUS PERSON?”.

Attachment: Replacement sheets